

Whole-Building Compliance for New Mixed-Use Buildings



Summary

The 2020 NGBS was the first version to allow mixed-use buildings to earn certification for both the residential and commercial/retail portions of the building. NGBS Chapters 5–10 outline compliance for new multifamily buildings and the residential portion of mixed-use buildings; Chapter 13 provides a Prescriptive compliance path for non-residential areas.

Unlike Chapters 5–10, which are a mix of mandatory and voluntary building practices and allow multiple compliance options, Chapter 13 is a Prescriptive approach where all practices are mandatory. While this works well with most mid- and low-rise mixed-use buildings, it is unworkable for high-rise buildings, where building performance is typically attained via a modeling approach and higher equipment efficiencies to offset a lower performing building envelope. Consequently, even with superior building energy performance, some mixed-use buildings are unable to attain a whole building certification using Chapter 13 because they do not comply with the specific practices regarding fenestration.

In accordance with **2020 NGBS Section 102.4 Alternative Compliance Methods**, Home Innovation – which serves as the national certification agency for the **National Green Building Standard® ICC-700** – allows a whole-building Performance Path approach for new mixed-use buildings as an equivalent compliance path.

Compliance Options

2020 NGBS Chapter 13 sets mandatory compliance criteria for the non-residential space of mixed-use buildings. The non-residential portion(s) of the building can earn the Certified level if the building is NGBS compliant.

Chapter 13 allows two certification options for non-residential space: (1) Core-and-Shell; or (2) Core-and-Shell + Fully Fitted Out and Equipped (FFOE). Core-and-Shell compliance is a prerequisite to earn FFOE certification.

Core-and-Shell compliance requires the building envelope to be energy efficient, which ensures that the building envelope will be high performing before the commercial tenants outfit the space to their specific needs. For new construction, this means air sealing, high-performance windows, an air barrier, and quality insulation to ensure the building's exterior is similarly high performing for both the residential and non-residential areas of the building.

New mixed-use buildings have three certification options available:

1. **Certification of the Residential Portion Only**

New buildings can earn NGBS Green certification at the Bronze, Silver, Gold, or Emerald levels if the **residential portion** of the building (apartments plus common areas) meets the compliance requirements of NGBS Chapters 5–10. A certificate is issued that states certification is for the “residential portions of the building.”

2. **Certification of the Residential Portion + Certification of the Commercial Space(s)**

In addition to certification of the residential portion as stated above, mixed-use buildings can also earn a *separate certification* – “Certified,” no levels – for the **commercial space** (Core-and-Shell or Fully Fitted Out and Equipped) if the non-residential area meets the NGBS Chapter 13 compliance requirements. Typically, two certificates are issued. One certificate is for the “residential portions of the building.” The second certificate is for the commercial space(s).¹

3. **Certification of the Whole Building**

Mixed-use buildings can earn NGBS Green certification at the Bronze, Silver, Gold, or Emerald levels if the **whole building** (residential portion plus the commercial areas) meets the 702 Performance Path energy efficiency compliance requirements using a commercial model. A certificate is issued for the entire building without distinction between the commercial and the residential portions.²

Discussion

The NGBS offers a rigorous, yet flexible, approach to the green design and construction of multifamily and mixed-use buildings. Since the 2008 NGBS version, projects have had a choice of compliance via a Prescriptive or Performance Path.

This flexibility for project teams to select either a Performance or Prescriptive Path while still having to meet an above-code baseline is instrumental in the NGBS’s widespread use for projects of all construction types, locations, and for all affordability levels.

The NGBS’s pragmatic and flexible approach serves to encourage builders and developers to reduce the building’s energy and water consumption by a measurable and meaningful amount. Home Innovation issued a clarification on this topic explaining that *existing* buildings compliance can be based on a [whole-building approach](#), regardless of whether the building has commercial space.

Verification Guidance

Verifiers working on projects that intend to use the whole building Performance Path for certification must have a building model compliant with ICC IECC C401.2 item 1 or ICC IECC C401.2 item 3.

¹ If desired, Home Innovation can also issue a separate certificate for each of the commercial spaces/tenants.

² See Home Innovation Interpretation [Whole-Building Compliance for Existing, Mixed-Use Buildings](#), dated March 1, 2022.